

# BY396~BY399

## FAST RECOVERY RECTIFIERS

**VOLTAGE** 100 to 800 Volt **CURRENT** 3.0 Ampere

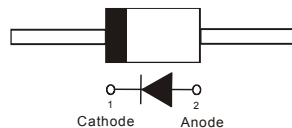
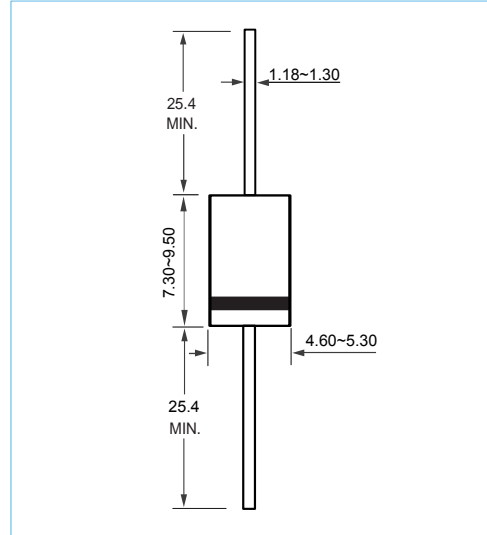
DO-201AD Unit:mm

### FEATURES

- High current capability
- Low leakage
- Fast switching for high efficiency.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



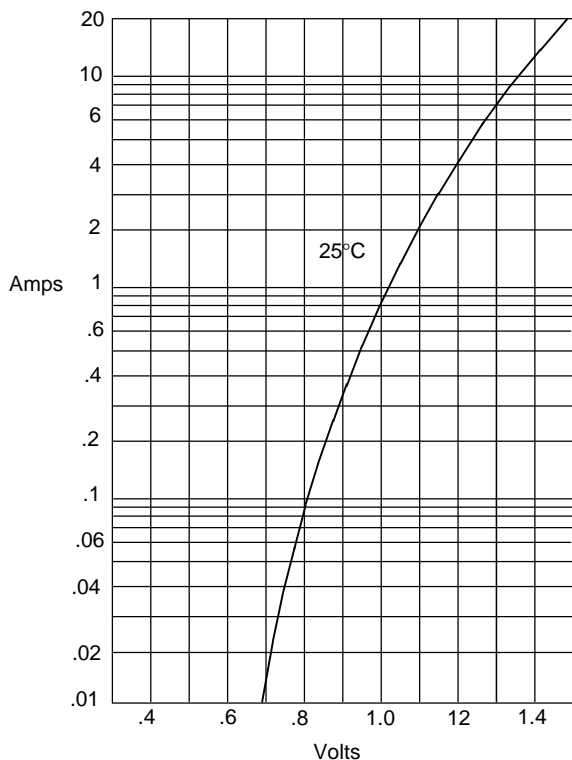
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	BY396	BY397	BY398	BY399	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	800	V
Maximum RMS Voltage	$V_{RMS}$	70	140	280	560	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	800	V
Maximum Average Forward Current (see FIG.2)	$I_{F(AV)}$	3.0				A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100				A
Maximum Forward Voltage at 3 A	$V_F$	1.3				V
Maximum DC Reverse Current at at Rated DC Blocking Voltage	$I_R$	10 200				$\mu A$
		$T_J=25^{\circ}C$ $T_J=100^{\circ}C$				
Typical Junction Capacitance	$C_J$	50				pF
Maximum Reverse Recovery Time	$t_{rr}$	150				ns
Typical Thermal Resistance	$R_{\theta JA}$	67				$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150				$^{\circ}C$

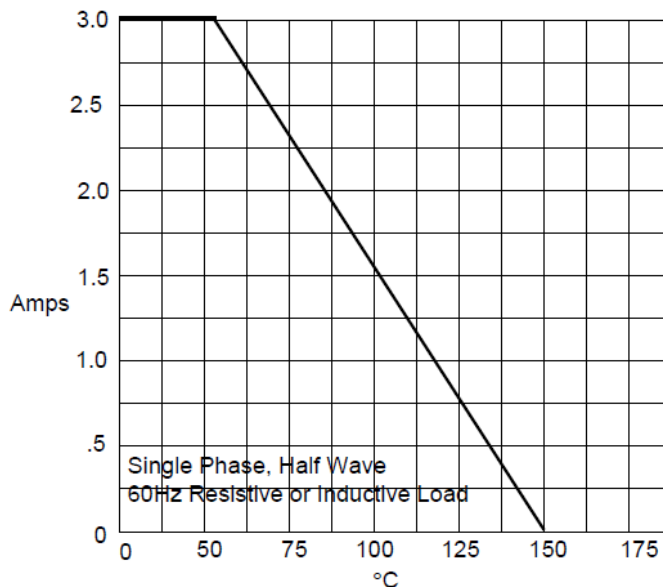
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Figure 1  
Typical Forward Characteristics



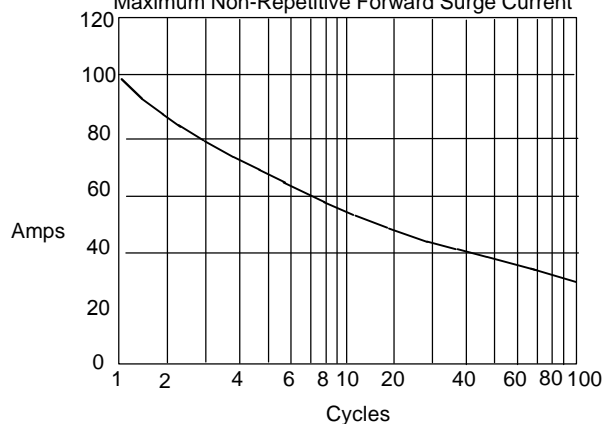
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



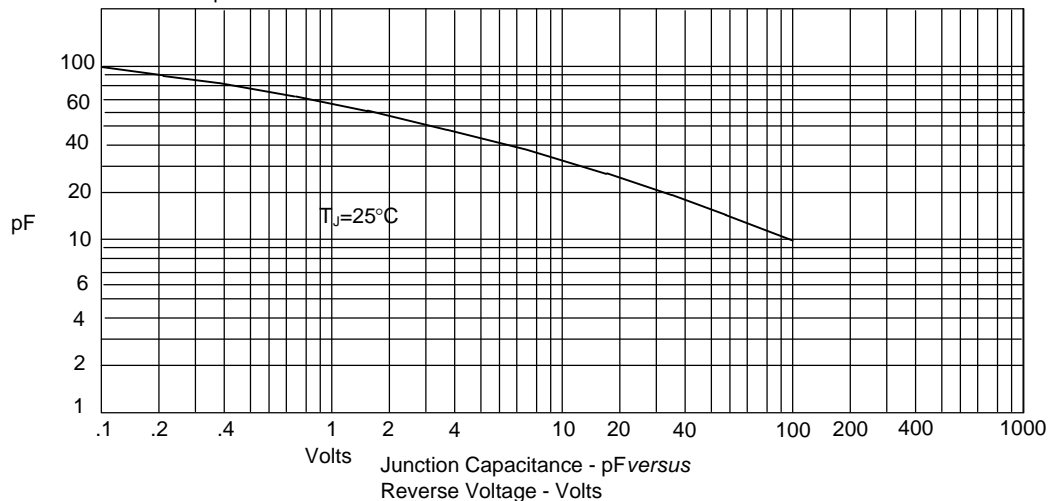
Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 4  
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles

Figure 3  
Junction Capacitance



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### Ordering Information

- **Packing information**

BY396~BY399	Packing Quantity
Tape&Reel	13 Inch; 1.25kpcs/Reel
Ammo Packing	1.25kpcs/Ammo Box
Bulk(Tube/Box)	0.5kpcs/Box